DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-4, 7, 8, 14-16 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 18 are vague and indefinite with respect to the acidic and basic aqueous solutions having a channel structure forming laminar flows therein. It is unclear to the examiner how a liquid can form a channel structure since no liquid that the examiner is aware of can form such a structure unless it is frozen and maintained at a temperature that will keep the solid state of the material, in which case, it would no longer be liquid.

Claims 2-3, 7, 8, 14-16 depend on claim 1 and therefore have the same deficiencies.

Claim Rejections - 35 USC § 102

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 7, 8, 14-16, 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Walther (4311,771).

Walther disclose an electrodialytic cell that produces electrical energy that is generated from acidic base neutralization reactions. The cells are contacted on their cation selective faces by aqueous acid streams and on their anion selective faces by

aqueous base streams. The neutralization reactions between the basic anions and acidic cations through the bipolar membranes produce electrical potential differences between the acid and bas streams. These potential differences are transmitted to electrodes to produce electrical energy which is withdrawn from the cell. See abstract. The electrodes conduct useful electrical energy in the form of electrons through the electrical connection to an electrical load. Acid substances are shown to be those of HCl, H_2SO_4, H_3PO_4 and ammonium salts. See col. 3, lines 41-64. Base substances are shown to be those of hydroxides of potassium, lithium or sodium. See col. 4, lines 26-52. The electrodes are disclosed to be of plate or disc configuration and are materials such as silver/silver chloride on platinum or platinum/rhodium. See examples 2 and 3.

The prior art of Walther anticipate the applicants instant invention as set forth in the instant claims as shown above with respect to the disclosure to Walther above. The examiner has not given weight to the acidic and basic solutions even though they are disclosed in the Walther patent, because in an apparatus, it is the structural features of the cell that are the novelty. Since these materials are only materials to be worked on and since the applicant has not stated that these materials are sealed in the cell, the acidic and basic materials have not been given patentable weight. Further, in the method of power generation, the prior art of Walther anticipates the claims since an acidic medium, a first electrode in contact there with, a basic medium and a second electrode in contact there with and since a reaction is disclosed wherein the electrons are generated by the electrodes, to create electrical energy, the method is inherently met.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce F. Bell whose telephone number is 571-272-1296. The examiner can normally be reached on Monday-Friday 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BFB
June 19, 2008

/Bruce F. Bell/
Primary Examiner, Art Unit 1795